

Instructions for Using the Plan Review Crosswalk for Review of Local Mitigation Plans

Attached is a Plan Review Crosswalk based on the **Multi-Hazard Mitigation Planning Guidance Under the Disaster Mitigation Act of 2000**, published by FEMA, dated March 2004. This Plan Review Crosswalk is consistent with **44 CFR Part 201 – Mitigation Planning, Interim Final Rule** (the Rule), in accordance with the **Stafford Act** (42 U.S.C. 5165), and **44 CFR Part 78.5 – Flood Mitigation Plan Development**, in accordance with the **National Flood Insurance Act of 1968** (42 U.S.C. 4104c et seq).

SCORING SYSTEM

N – Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.

S – Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Each requirement includes separate elements. All elements of a requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a summary score of "Satisfactory." A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing.

When reviewing single jurisdiction plans, reviewers may want to put an N/A in the boxes for multi-jurisdictional plan requirements. When reviewing multi-jurisdictional plans, reviewers may want to put an N/A in the prerequisite box for single jurisdiction plans.

States that have additional requirements can add them in the appropriate sections of the *Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

Optional matrices for assisting in the review of sections on profiling hazards, assessing vulnerability, and identifying and analyzing mitigation actions are found at the end of the Plan Review Crosswalk.

The example below illustrates how to fill in the Plan Review Crosswalk.

Example

Assessing Vulnerability: Overview

- Multihazard Requirement §201.6(c)(2)(ii):** *[The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.*
- FMA Requirement §78.5(b):** *Description of the existing flood hazard and identification of the flood risk,, and the extent of flood depth and damage potential.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			Stafford		FMA	
			N	S	N	S
A. Does the plan include an overall summary description of the jurisdiction's vulnerability to each hazard?	Section II, pp. 4-10	The plan describes the types of assets that are located within geographically defined hazard areas as well as those that would be affected by winter storms.		✓		✓

B. Does the plan address the impact of each hazard on the jurisdiction?	Section II, pp. 10-20	The plan does not address the impact of one of the five hazards addressed in the plan. Required Revisions: <ul style="list-style-type: none">• Include a description of the impact of earthquakes on the assets. Recommended Revisions: <ul style="list-style-type: none">• This information can be presented in terms of dollar value or percentages of damage.	✓			✓
SUMMARY SCORE			✓			✓

Local Mitigation Plan Review and Approval Status

Jurisdiction: Richland County	Title of Plan: Richland County Community Wildfire Protection Pre-disaster Mitigation Plan	Date of Plan: December 2005
Local Point of Contact: Butch Renders	Address: 121 3 rd Avenue NW Sidney, MT 59270	
Title: Richland County Disaster and Emergency Services Coordinator		
Agency: Richland County		
Phone Number: 406-433-2220	E-Mail: des@richland.org	

State Reviewer: Kent Atwood	Title: SHMO	Date: July 14, 2006
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FEMA Reviewer: Ken Crawford Jennifer Fee Wade Nofziger	Title: Mitigation Program Specialist Planner Mitigation Program Specialist	Date: July 31, 2006 August 24, 2006 September 8, 2006
Date Received in FEMA Region VIII	July 18, 2006	
Plan Not Approved		
Plan Approved	XXX	
Date Approved	October 24, 2006	

Jurisdiction:	NFIP Status*			
	Y	N	N/A	CRS Class
Richland County (Good Standing – mapped 12/04/85)	X			
City of Sidney (Good Standing – mapped 12/04/85)	X			
Town of Fairview (Good Standing – mapped 05/15/86)	X			

* Notes: Y = Participating N = Not Participating N/A = Not Mapped

LOCAL MITIGATION PLAN REVIEW SUMMARY

The plan cannot be approved if the plan has not been formally adopted.

Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a "Needs Improvement" score.

SCORING SYSTEM

Please check one of the following for each requirement.

N – Needs Improvement: The plan does not meet the minimum for the requirement.

Reviewer's comments must be provided.

S – Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Prerequisite(s) (Check Applicable Box)

Adoption by the Local Governing Body:
§201.6(c)(5) and §78.5(f)

OR

Multi-Jurisdictional Plan Adoption: §201.6(c)(5)
and §78.5(f) **AND**

Multi-Jurisdictional Planning Participation:
§201.6(a)(3) and §78.5(a)

Planning Process

Documentation of the Planning Process:
§201.6(b) and §201.6(c)(1) and §78.5(a)

Risk Assessment

Identifying Hazards: §201.6(c)(2)(i) and §78.5(b)

Profiling Hazards: §201.6(c)(2)(i) and §78.5(b)

Assessing Vulnerability: Overview:
§201.6(c)(2)(ii) and §78.5(b)

Assessing Vulnerability: Identifying Structures:
§201.6(c)(2)(ii)(A) and §78.5(b)

Assessing Vulnerability: Estimating Potential
Losses: §201.6(c)(2)(ii)(B)

Assessing Vulnerability: Analyzing Development
Trends: §201.6(c)(2)(ii)(C)

Multi-Jurisdictional Risk Assessment:
§201.6(c)(2)(iii) and FEMA 299

STAFFORD		FMA	
NOT MET	MET	NOT MET	MET
	N/A		N/A

	X		X
	X		X

N	S	N	S
	X		X

N	S	N	S
	X		X
	X		X
	X		X
X			X
X		X	
X		X	
	X		X

Mitigation Strategy

Local Hazard Mitigation Goals: §201.6(c)(3)(i) and §78.5(c)

Identification and Analysis of Mitigation Actions:
§201.6(c)(3)(ii) and §78.5(d)

Implementation of Mitigation Actions:
§201.6(c)(3)(iii) and §78.5(d) and (e)

Multi-Jurisdictional Mitigation Actions:
§201.6(c)(3)(iv) and FEMA 299

STAFFORD		FMA	
N	S	N	S
	X		X
	X		X
	X		X
	X		X

Plan Maintenance Process

Monitoring, Evaluating, and Updating the Plan:
§201.6(c)(4)(i) and §78.5(e)

Incorporation into Existing Planning Mechanisms:
§201.6(c)(4)(ii)

Continued Public Involvement: §201.6(c)(4)(iii)

STAFFORD		FMA	
N	S	N	S
	X		X
	X		X
	X		X

Additional State Requirements*

Insert State Requirement

Insert State Requirement

Insert State Requirement

STAFFORD		FMA	
N	S	N	S

LOCAL MITIGATION PLAN APPROVAL STATUS

PLAN NOT APPROVED

STAFFORD	FMA

PLAN APPROVED

STAFFORD	FMA
XXX	XXX

*States that have additional requirements can add them in the appropriate sections of the *Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

See Reviewer's Comments

Comment [m1]: Check with Bonnie to see what should come of this deficiency.

PREREQUISITE(S)

Adoption by the Local Governing Body

- **Multihazard Requirement §201.6(c)(5):** *[The local hazard mitigation plan **shall** include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).*
- **FMA Requirement §78.5(f):** *Documentation of formal plan adoption by the legal entity submitting the plan (e.g., Governor, Mayor, County Executive).*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			NOT MET	MET	NOT MET	MET
A. Has the local governing body adopted the plan?	N/A					
B. Is supporting documentation, such as a resolution, included?	N/A					
SUMMARY SCORE				N/A		N/A

Multi-Jurisdictional Plan Adoption

- **Multihazard Requirement §201.6(c)(5):** *For multi-jurisdictional plans, each jurisdiction requesting approval of the plan **must** document that it has been formally adopted.*
- **FMA Requirement §78.5(f):** *Documentation of formal plan adoption by the legal entity submitting the plan (e.g., Governor, Mayor, County Executive).*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			NOT MET	MET	NOT MET	MET
A. Does the plan indicate the specific jurisdictions represented in the plan?	viii CWPP 5-2	Richland County and the incorporated municipalities of Sidney and Fairview are represented in the plan.		X		X
B. For each jurisdiction, has the local governing body adopted the plan?	v-vii CWPP 5-1	All participating jurisdictions adopted the plan.		X		X
C. Is supporting documentation, such as a resolution, included for each participating jurisdiction?	v-vii CWPP 5-1	Signed resolutions dated October – December 2005 are provided in the plan for all three participating jurisdictions. Plan received by FEMA Region VIII on 7/18/06.		X		X
SUMMARY SCORE				X		X

Multi-Jurisdictional Planning Participation

- **Multihazard Requirement §201.6(a)(3):** *Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process ... Statewide plans will not be accepted as multi-jurisdictional plans.*
- **FMA Requirement §78.5(a):** *Description of the planning process and public involvement. Public involvement **may** include workshops, public meetings, or public hearings.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			NOT MET	MET	NOT MET	MET
A. Does the plan describe how each jurisdiction participated in the plan's development?	viii, 2-4 to 2-45	The plan discusses how each participating jurisdiction participated in the plan's development through the Steering Committee, specifically by providing data, helping to set priorities, and identifying mitigation projects. Chapter 2, pages 8 - 45 provides meeting agendas, sign-in sheets and correspondence. A list of Steering Committee members can be found on pages 2-4 to 2-5.		X		X
SUMMARY SCORE				X		X

PLANNING PROCESS:

Documentation of the Planning Process

- **Multihazard Requirement §201.6(b):** *An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:*
 - (1) *An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*
 - (2) *An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and*
 - (3) *Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.*
- **Multihazard Requirement §201.6(c)(1):** *[The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*
- **FMA Requirement §78.5(a):** *Description of the planning process and public involvement. Public involvement **may** include workshops, public meetings, or public hearings.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan provide a narrative description of the process followed to prepare the plan?	1-2, Chapter 2, and CWPP 5-3 to 5-4	A narrative description of the planning process is well documented from participants, interviews, and the Steering Committee roles and meetings. The description includes meeting summaries, sign-in sheets, news articles and correspondence. Chapter 5 describes the process undertaken for the CWPP.		X		X

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
B. Does the plan indicate who was involved in the planning process? (For example, who led the development at the staff level and were there any external contributors such as contractors? Who participated on the plan committee, provided information, reviewed drafts, etc.?)	viii, 1-2, 2-2 to 2-6, 2-35 to 2-41, and CWPP 5-2	<p>The plan indicates that several entities and persons were involved in the planning process including: Cossitt Consulting, County DES coordinator, fire staff, participating jurisdictions, the Steering Committee (a list of invited participants is found on pages 2-4 to 2-5; attending participants are found on the sign-in sheets 2-27 to 2-34), and the public. Local news releases and articles of the planning process, meeting summaries, and sign-in sheets are also included in the plan.</p> <p>Recommended Revisions for the Five Year Update: While the list of invitees for the Steering Committee covers many of the key stakeholders within Richland County, the Committee is encouraged to seek stronger attendance and participation by many of these invitees absent from the 3 meetings. If other meetings occur with these participants outside of the 3 public Steering Committee meetings (which is encouraged), then this should be documented in the plan. Also recommended is to encourage participation of interested homeowner association representatives.</p>		X		X

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
C. Does the plan indicate how the public was involved? (Was the public provided an opportunity to comment on the plan during the drafting stage and prior to the plan approval?)	2-2 to 2-6, and CWPP 5-4 to 5-5	The plan describes how the public was involved in detail on pages 2-4 to 2-5. Three Steering Committee meetings were held, which were open to the public. The public was able to participate via identifying and prioritizing hazards, drafting goals, and prioritizing projects. There was a mailing of letters to the public and a 30-day review period with public comments provided. Chapter 5 also describes the public involvement for the development of the CWPP. Recommended Revisions for the Five Year Update: While not required, that the public comments be shown (i.e., correspondence, emails, phone conversations, meetings) possibly within an Appendix. Providing an explanation of how they were addressed would benefit the local community to show how their participation resulted in the adoption of their community's Plan. Further clarification will help the public and neighboring communities understand. Explaining how much discussion of the plan took place outside these meetings which often times is a major contribution to the process.		X		X
D. Was there an opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process?	2-2 to 2-6, and CWPP 5-2 to 5-3	Three meetings were held that were open to the public and to neighboring communities and other interested parties. News releases were provided to local newspapers, which explained the purpose of the meetings, schedule, topics and contact information. A summary the meeting and announcing the commencement of the plan process was sent to the Sidney Herald and the Roundup.		X		X
E. Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?	2-6, 3-3 to 3-5, and CWPP 5-2	The plan provides a good inclusion of references throughout the document. Many footnotes attribute sources of studies, quotes, etc., to a large parameter of plans, reports and other technical and informative sources researched for the plan. Table 3.1 includes a column "How Identified" which describes sources that were used for all of the identified hazards.		X		X
SUMMARY SCORE				X		X

RISK ASSESSMENT: §201.6(c)(2): *The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.*

Identifying Hazards

Requirement §201.6(c)(2)(i): *[The risk assessment shall include a] description of the type ... of all natural hazards that can affect the jurisdiction.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the plan include a description of the types of all natural hazards that affect the jurisdiction? If the hazard identification omits (without explanation) any hazards commonly recognized as threats to the jurisdiction, this part of the plan cannot receive a Satisfactory score. Consult with the State Hazard Mitigation Officer to identify applicable hazards that may occur in the planning area.	Chapter 3, and CWPP 5-5 to 5-22	Each hazard profile provides a description of the hazard potentially impacting the county including a summary tables and maps. The plan includes information for all identified hazards and in most cases the data used are more extensive than that found from readily available on-line resources. Refer to SHEL DUS (www.sheldus.org) for additional information. It may be helpful to include some of the columns that SHEL DUS uses for the identified hazards. Richland County appears to have a Flood Insurance Study, which went into effect 1985. Refer to http://msc.fema.gov/ for more information. The National Inventory of Dams and the PDMP appears to indicate that there are several low hazard dams in Richland and one high hazard dam. The high hazard dam, Gartside, does have an emergency action plan. The National Dam Safety Act requires that an emergency action plan (EAP) be completed for high hazard dams. Please see http://crunch.tec.army.mil/nid/webpages/nid.cfm (introduction and download dam data) for National Dam Inventory information. Online EPA data suggests that there are no toxic release inventory sites in Richland County. Please see http://www.epa.gov/triexplorer/ for more information.		X
SUMMARY SCORE				X

Profiling Hazards

- **Multihazard Requirement §201.6(c)(2)(i):** [The risk assessment **shall** include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan **shall** include information on previous occurrences of hazard events and on the probability of future hazard events.
- **FMA Requirement §78.5(b):** Description of the existing flood hazard and identification of the flood risk,, and the extent of flood depth and damage potential.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the risk assessment identify the location (i.e., geographic area affected) of each natural hazard addressed in the plan?	3-6 to 3-38, and CWPP 5-5 to 5-22	The plan describes the geographical area of all identified hazards and can be found in the hazard profiles. Several of the hazards include a map, which depict the hazards location.		X		X
B. Does the risk assessment identify the extent (i.e., magnitude or severity) of each hazard addressed in the plan?	3-6 to 3-38, and CWPP 5-5 to 5-22	The magnitude of past events is highlighted in the identified hazard historical occurrences and the vulnerability section. The plan also includes potential loss estimates for all identified hazards.		X		X
C. Does the plan provide information on previous occurrences of each hazard addressed in the plan?	3-6 to 3-38, and CWPP 5-5 to 5-9	Previous occurrences of each type of hazard are addressed in the hazard profiles. Some of the identified hazards include tables, with a combination of factors, although they are not consistent throughout the risk assessment section. Recommended Revisions for the Five Year Update: It may be helpful to develop a table that lists location of hazard, date, time, magnitude, death, injuries, property damage and crop damage in addition to the narrative description. To ensure consistency, the criteria identified i.e. location; damage estimate etc. should be the same for all tables. Refer to (www.sheldus.org) for detailed information on past occurrences.		X		X
D. Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the plan?	3-6 to 3-38, and CWPP 5-5 to 5-22	Each hazard profile discusses probability of future events within the Vulnerability and Potential Loss Estimate section. Probability of future occurrences was provided for each identified hazard in terms of high, moderate and low probability.		X		X
SUMMARY SCORE				X		X

Assessing Vulnerability: Overview

- **Multihazard Requirement §201.6(c)(2)(ii):** *[The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.*
- **FMA Requirement §78.5(b):** *Description of the existing flood hazard and identification of the flood risk,, and the extent of flood depth and damage potential.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan include an overall summary description of the jurisdiction's vulnerability to each hazard?	3-6 to 3-46, and CWPP 5-5 to 5-22	The plan <u>successfully</u> discusses vulnerability. Each identified hazard has a Vulnerability and Potential Loss section that discusses direct and indirect effects and potential losses. In addition, the plan includes a section on <i>Assets and Vulnerable Populations that Could be Affected</i> , which addresses critical facilities and infrastructure, and vulnerable populations.		X		X
B. Does the plan address the impact of each hazard on the jurisdiction?	3-6 to 3-38, and CWPP 5-5 to 5-22	The hazard profiles identify past events and provide time periods and a general description of the event. The plan would be enhanced if all the tables found within the Historical Occurrences section included: location, loss structures, injuries, deaths, and costs. Recommended Revisions for the Five Year Update: Please include location, loss structures, injuries, deaths, and costs in the history section of the hazard profiles.		X		X
SUMMARY SCORE				X		X

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Assessing Vulnerability: Identifying Structures

- **Multihazard Requirement §201.6(c)(2)(ii)(A):** *The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area ...*
- **FMA Requirement §78.5(b):** *Description of the existing flood hazard and identification of the flood risk, including **estimates of the number and type of structures at risk, repetitive loss properties**,....*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan describe vulnerability in terms of the types and numbers of existing buildings (including repetitive loss structures), infrastructure, and critical facilities located in the identified hazard areas? <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>	3-39 to 3-46	The plan <u>provides a good discussion on the</u> vulnerable structures; most of the discussion within this section is not related to identified hazards. The plan states that the identified hazards might strike any where in the county; vulnerability may vary depending on the hazard and different mitigation techniques may also exist. The Business Related Loss Potential and Power and Communication Loss Potential sections are related to identified hazards; to meet this requirement, all identified vulnerable structures must be in relation to identified hazards. Recommended Revisions: For all identified hazards, specify the number and types of existing buildings, infrastructure, and critical facilities within each hazard area . Table 3.14 would be enhanced if a column was added which described the hazard that has the potential of impacting the structure. In addition, overlaying the critical facility figure with the hazards figures may be helpful.	X			X
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B. Does the plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas? <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>	1-5 to 1-6	Plan includes a <u>well written</u> section on Land Use and Development Trends. Future development discussion is in general terms and needs to be specific to identified hazards. Recommended Revisions: For all identified hazards specify the number of future buildings, infrastructure, and critical facilities within each hazard area . <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>	X		X	
Deleted: n excellent						
SUMMARY SCORE			X			X

Assessing Vulnerability: Estimating Potential Losses

- **Multihazard Requirement §201.6(c)(2)(ii)(B):** *[The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section and a description of the methodology used to prepare the estimate*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan estimate potential dollar losses to vulnerable structures?	3-39 to 3-46, and CWPP 5-17 to 5-20	<p>The plan includes insured/replacement value for all identified critical facilities and infrastructure, although they are not separated by identified hazard area.</p> <p>Recommended Revisions:</p> <p>For all identified hazards specify the dollar amount to vulnerable structures within each hazard area.</p> <p><i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i></p>	X		X	
B. Does the plan describe the methodology used to prepare the estimate?	3-39 to 3-46, and CWPP 5-17	<p>The plan does not include the methodology used to prepare the estimate of replacement cost. The source cited under Table 3.14 is "Various Facilities, Local Governments, etc."</p> <p>The CWPP does include the methodology used to prepare the potential dollar loss estimate stating, on page 5-17, that a wildfire scenario was developed.</p> <p>Recommended Revisions for the Five Year Update:</p> <p>Please be more specific on how the estimates were derived. For example, are they based on property tax records, U.S census data, phone conversations, or hazard scenarios?</p> <p><i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i></p>	X		X	
SUMMARY SCORE			X		X	

Assessing Vulnerability: Analyzing Development Trends

- Multihazard Requirement §201.6(c)(2)(ii)(C):** *[The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan describe land uses and development trends?	1-5 to 1-6, and CWPP 5-9 to 5-12	<p>The plan provides a <u>well written</u> section on Land Use and Development Trends on pages 1-5 to 1-6. The discussion <u>however</u> is not in relation to identified hazards.</p> <p>Recommended Revisions:</p> <p>Please describe land use development, where it is happening and type of development, in relation to identified hazards, so mitigation options can be considered.</p> <p><i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i></p>				
			X		X	
SUMMARY SCORE			X		X	

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Multi-Jurisdictional Risk Assessment

- **Multihazard Requirement §201.6(c)(2)(iii):** *For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.*
- **FMA FEMA 299 Guidance:** *The Plan should be coordinated with, and ideally developed in cooperation with, all of the local jurisdictions within the geographical area.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan include a risk assessment for each participating jurisdiction as needed to reflect unique or varied risks?	3-6 to 3-46, 4-2, and CWPP 5-5 to 5-22	<p>The plan includes discussions, within the hazard profiles, that describe locations that the hazard will most likely affect. In addition, the majority of identified hazards include a map depicting the areas affected. The plan states that the majority of identified hazards, with the exception of floods, are countywide. Page 4-2 also highlights unique risk factors among the participating jurisdictions.</p> <p>The CWPP excels at including a risk assessment for each participating jurisdiction and includes trends both for the current situation and for future development.</p> <p><i>Note: A "Needs Improvement" score on this requirement will not preclude the FMA plan from passing.</i></p>		X		X
SUMMARY SCORE				X		X

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MITIGATION STRATEGY: §201.6(c)(3): *The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.*

Local Hazard Mitigation Goals

- **Multihazard Requirement §201.6(c)(3)(i):** *[The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.*
- **FMA Requirement §78.5(c):** *The applicant's floodplain management goals for the area covered by the plan.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A Does the plan include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards? (GOALS are long-term; represent what the community wants to achieve, such as "eliminate flood damage"; and are based on the risk assessment findings.)	4-2 to 4-6, and CWPP 5-22 to 5-25	The plan lists five goals; most appear to be directly related to mitigation.		X		X
SUMMARY SCORE				X		X

Identification and Analysis of Mitigation Actions

- **Multihazard Requirement §201.6(c)(3)(ii):** *[The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.*
- **FMA Requirement §78.5(d):** *Identification and evaluation of cost-effective and technically feasible mitigation actions considered.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?	4-2 to 4-6, and CWPP 5-22 to 5-25	The plan identifies and analyzes a broad range of mitigation measures, although most are more related to Preparedness and Response activities.		X		X
B Do the identified actions and projects address reducing the effects of hazards on new buildings and infrastructure?	4-2 to 4-6, and CWPP 5-22 to 5-25	The plan does include one project which discusses reducing the effects of hazards on new buildings. The project is to continue to assess standards for rebuilding roads and bridges in areas that experience flooding.		X		X

C. Do the identified actions and projects address reducing the effects of hazards on existing buildings and infrastructure?	4-2 to 4-6, and CWPP 5-22 to 5-25	The plan does include several projects that address existing buildings and infrastructure.		X	X
SUMMARY SCORE				X	X

Implementation of Mitigation Actions

- **Multihazard Requirement: §201.6(c)(3)(iii):** *[The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.*
- **FMA Requirement §78.5(d):** *Identification and evaluation of cost-effective and technically feasible mitigation actions considered; and*
- **FMA Requirement §78.5(e):** *Presentation of the strategy for reducing flood risks and continued compliance with the NFIP, and procedures for ensuring implementation, reviewing progress, and recommending revisions to the plan.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the mitigation strategy include how the actions are prioritized ? (For example, is there a discussion of the process and criteria used?)	4-6	The plan provides a good discussion on the methodology used to prioritize the actions. The plan indicates that projects were ranked by high, medium, or low based on specific criteria including: number of lives at risk, value of property at risk, infrastructure at risk, risk of business interruptions, and cost/benefit of the project.		X		X
B. Does the mitigation strategy address how the actions will be implemented and administered ? (For example, does it identify the responsible department, existing and potential resources, and timeframe?)	4-7 to 4-9, and CWPP 5-23 to 5-24	The plan indicates that the projects will be implemented as funds become available. Table 4.1 includes potential resources for each project. In addition, Table 4.2 includes timeframes and a range of costs for all identified mitigation projects.		X		X
B.1. Does the mitigation strategy address continued compliance with the NFIP?	4-10	The plan states that the county will take measures to ensure continued compliance with the NFIP.		X		X
C. Does the prioritization process include an emphasis on the use of a cost-benefit review (see page 3-36 of <i>Multi-Hazard Mitigation Planning Guidance</i>) to maximize benefits?	4-6 to 4-9	The plan includes a discussion on putting an emphasis on benefits compared to costs. The table on pages 4-7 to 4-9 lists projects and provides a		X		X

Jurisdiction: **RICHLAND COUNTY, MONTANA**

		scale of low to high for benefits and costs.				
C.1. Does the mitigation strategy emphasize cost-effective and technically feasible mitigation actions?	4-10	See above.		X		X
SUMMARY SCORE				X		X

Multi-Jurisdictional Mitigation Actions

- **Multihazard Requirement §201.6(c)(3)(iv):** *For multi-jurisdictional plans, there **must** be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.*
- **FMA FEMA 299 Guidance:** *The Plan should be coordinated with, and ideally developed in cooperation with, all of the local jurisdictions within the geographical area.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A Does the plan include at least one identifiable action item for each jurisdiction requesting FEMA approval of the plan?	4-6 to 4-9	Most of the mitigation measures are countywide measures. However, the plan includes at least one action item for the participating jurisdictions. Table 4.1 indicates that the potential resources for several of the mitigation actions.		X		X
SUMMARY SCORE				X		X

PLAN MAINTENANCE PROCESS

Monitoring, Evaluating, and Updating the Plan

- **Multihazard Requirement §201.6(c)(4)(i):** *[The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.*
- **FMA Requirement §78.5(e):** *Presentation of the strategy for reducing flood risks and continued compliance with the NFIP, and procedures for ensuring implementation, reviewing progress, and recommending revisions to the plan.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan describe the method and schedule for monitoring the plan? (For example, does it identify the party responsible for monitoring and include a schedule for reports, site visits, phone calls, and meetings?)	Chapter 6	The plan indicates the Richland County Commissioner will be responsible for ensuring that the PDM/CWPP plan is kept current and also evaluate its effectiveness. A schedule includes three situations that would trigger the review of the plan.		X		X
B. Does the plan describe the method and schedule for evaluating the plan? (For example, does it identify the party responsible for evaluating the plan and include the criteria used to evaluate the plan?)	Chapter 6	The plan indicates the Richland County Commissioner will be responsible for ensuring that the PDM/CWPP plan is kept current and also evaluate its effectiveness. The Richland County DES coordinator and the Chair of the LEPC will be the co-leads. The criteria that the plan will be evaluated against are listed on page 6-1		X		X
C. Does the plan describe the method and schedule for updating the plan within the five-year cycle?	Chapter 6	The plan indicates that every five years, beginning with 2010, the plan will be updated and submitted to the Montana DES and FEMA Regional Office for their approval.		X		X
SUMMARY SCORE				X		X

Incorporation into Existing Planning Mechanisms

- **Multihazard Requirement §201.6(c)(4)(ii):** *[The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan identify other local planning mechanisms available for incorporating the requirements of the mitigation plan?	6-2	The plan states that the plan can be incorporated as appropriate into existing plans, annual budgets, and any growth Policy that may be developed. A matrix was provided to indicate the various plans that are used within the county.		X		X
B. Does the plan include a process by which the local government will incorporate the requirements in other plans, when appropriate?	6-2	The plan states that the DES Coordinator will continue to identify options for incorporation into other plans. The matrix showed what plans were available. It also discussed some of the limitations. For the Five Year Update: Where possible, provide more detail on how the various plans work together for the good of the county.		X		X
SUMMARY SCORE				X		X

Continued Public Involvement

- **Multihazard Requirement §201.6(c)(4)(iii):** [The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE			
			STAFFORD		FMA	
			N	S	N	S
A. Does the plan explain how continued public participation will be obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)	6-2	The LEPC meeting will be held each January starting 2007 and the meeting will be noticed in the local newspaper. Participants of the steering committee will be encouraged to attend. The plan also indicates that the DES will maintain a file to store comments or input on changes.		X		X
SUMMARY SCORE				X		X

ADDITIONAL QAQC COMMENTS (by Nan Johnson):

1. Crosswalk Section "Identifying Hazards, Element A." - the Reviewer's Comments note that several low hazard dams and one high hazard dam exist in Richland County. The SHMO comments that the dams present a negligible risk as stated in the Plan pages 3-3 and 3-23. However, the Plan states on page 3-3 that of the 80 dams exist, 1 is categorized as a high hazard, 10 are a significant hazard. Reference to the dam hazards and risks should be clarified in the Plan.
2. PDM Chapter 3, page 3-5, third sentence: "... each of the above identified hazards is reviewed in depth in this chapter." Added language such as "... identified hazards LISTED IN TABLE 3.1 ..." would clarify which 'above identified hazards' - FEMA's hazards or Richland's identified hazards.
3. Crosswalk Section "Assessing Vulnerability: Identifying Structures, Element B" and Section "Assessing Vulnerability: Analyzing Development Trends, Element A" - the Recommended Revisions comment should add "... Provide further details on building permit and subdivision activity, annexations, platting, special use permits, infrastructure construction and budget requests. Distinguish county unincorporated activities from the incorporated areas of the county."
4. Crosswalk Section "Identification and Analysis of Mitigation Actions, Element A" - Should the following responder's comment and score be acceptable? "The plan identifies and analyzes a broad range of mitigation measures, although most are more related to Preparedness and Response activities." Should those projects then go in a preparedness plan rather than serve as this mitigation plan's projects list?
5. Question: It is stated several times in the plan that "Future development in Richland County is likely to be similar to existing." If the population has been on the decline with little new development as stated in the plan, then why was more land annexed into Sidney and why is there a housing shortage in Fairview? Could these be indicators of a growing development market? What has been the building permit activity both for residential, commercial/industrial for Richland County and the municipalities?

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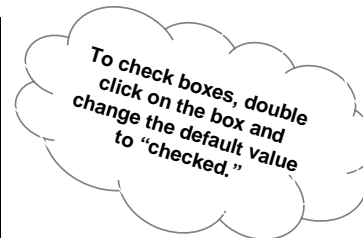
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Matrix A: Profiling Hazards

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that their plan addresses each natural hazard that can affect the jurisdiction. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Location		B. Extent		C. Previous Occurrences		D. Probability of Future Events	
	Yes	N	S	N	S	N	S	N	S
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Legend:**

§201.6(c)(2)(i) Profiling Hazards

- A. Does the risk assessment identify the location (i.e., geographic area affected) of each hazard addressed in the plan?
- B. Does the risk assessment identify the extent (i.e., magnitude or severity) of each hazard addressed in the plan?
- C. Does the plan provide information on previous occurrences of each natural hazard addressed in the plan?
- D. Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the plan?

Matrix B: Assessing Vulnerability

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that their plan addresses each requirement. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Note: Receiving an N in the shaded columns will not preclude the plan from passing.

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i) Yes	§201.6(c)(2)(ii) Assessing Vulnerability: Overview				Identifying Structures	§201.6(c)(2)(ii) Assessing Vulnerability: Identifying Structures				Estimating Potential Losses	A. Loss Estimate		B. Methodology	
		A. Overall Summary Description of Vulnerability		B. Hazard Impact			A. Types and Number of Existing Structures in Hazard Area (Estimate)		B. Types and Number of Future Structures in Hazard Area (Estimate)			N	S	N	S
		N	S	N	S		N	S	N	S					
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

To check boxes, double click on the box and change the default value to "checked."

Legend:

§201.6(c)(2)(ii) Assessing Vulnerability: Overview

A. Does the plan include an overall summary description of the jurisdiction's vulnerability to each hazard?

B. Does the plan address the impact of each hazard on the jurisdiction?

B. Does the plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas?

§201.6(c)(2)(ii)(A) Assessing Vulnerability: Identifying Structures

A. Does the plan describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas?

§201.6(c)(2)(ii)(B) Assessing Vulnerability: Estimating Potential Losses

A. Does the plan estimate potential dollar losses to vulnerable structures?

B. Does the plan describe the methodology used to prepare the estimate?

Matrix C: Identification and Analysis of Mitigation Actions

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure consideration of a range of actions for each hazard. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An "N" for any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Comprehensive Range of Actions and Projects	
		Yes	N S
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To check boxes, double click on the box and change the default value to "checked."

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Comprehensive Range of Actions and Projects	
		N	S
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Legend:

§201.6(c)(3)(ii) Identification and Analysis of Mitigation Actions

A. Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?